



SEQUENCE LISTING

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<120> POLYNUCLEOTIDE CONSTRUCTS AND USES THEREOF

<130> 674523-2029.1

<140> 10/810,262

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<150> GB 9901906.9

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<150> GB 9903538.8

<151> 1999-02-16

<160> 34

<170> PatentIn Ver. 3.2

<210> 1

<211> 25

<212> DNA

<213> Mus sp.

<400> 1

cgcgctcggtg caggacgtga caaat

25

<210> 2

<211> 19

<212> DNA

<213> Mus sp.

<400> 2

gtcgggtgcag gacgtgaca

19

<210> 3

<211> 243

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: OBhre1

oligonucleotide

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<400> 3
gctagagtcg tgcaggacgt gacatctagt gtcgtgcagg acgtgacatc tagtgctcgtg 60
caggacgtga cagctagccc gggctcgaga tctgcgatct gcatctcaat tagtcagcaa 120
ccatagtccc gccctaaact ccgcccatac cgcccctaac tccgccagat tccgccatt 180
ctccgccccca tcgctgacta atttttttta tttatgcaga ggccgaggcc gcctcggcct 240
ctg 243

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<210> 4
<211> 229
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide construct

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<400> 4
agctagccta gcgtcgtgca ggacgtgaca tctagtgtcg tgcaggacgt gacatctagt 60
gtcgtgcagg acgtgacatc tagagaacca tcagatgttt ccagggtgcc ccaaggacct 120
gaaatgacct tgtgccttat ttgaactaac caatcagttc gcttctcgtt tctgttcgct 180
cgcttctgct ccccgagctc aataaaagag cccacaacct ctcactcgg 229

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<210> 5
<211> 225
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
      oligonucleotide construct

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<400> 5
aagctagctg tcacgtcctg caccgacacta gatgtcacgt cctgcacgac actagatgtc 60
acgtcctgca cgactctaga gaaccatcag atgtttccag ggtgccccaa ggacctgaaa 120
tgacctgtg ccttatttga actaaccaat cagttcgtt ctcgcttctg ttgcgcgct 180
tctgctcccc gagtcaata aaagagccca caaccctca ctg 225

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<210> 6
<211> 633
<212> DNA
<213> Homo sapiens

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<400> 6
atggatgccca tgaagagggg cctctgctgt gtgctcctgc tctgtggggc cgtcttcgtc 60
agcccaagcg ggaccggctc ccacagccac cgcgacttcc agcccggtgt gcacctggtg 120
gccctgaaca gcccctgag cggcggcatg cgcggcatca ggggcgctga cttccagtgc 180
ttccagcagg ccaggggcgt gggcctggcc ggcaccttcc gcgccttctt gagcagccgc 240
ctgcaggacc tgtacagcat cgtgcgcagg gccgaccgcg ctgccgtgcc catcgtgaac 300
ctgaaggacg agctgctgtt cccagctgg gaggcctgt tcagcggcag cgagggcccc 360
ctgaagccag gcgccaggat cttcagcttc gacggcaagg acgtgctgcg ccacccacc 420
tgccccaga agagcgtgtg gcacggctcc gaccccaacg gccgcaggct gaccgagagc 480
tactgcgaga cctggcgcac cgaggcccc agcgccaccg gccaggccag ctccctgctg 540

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ggcggcaggc tgctgggcca gagegcccgc agctgccacc acgcctacat cgtgctgtgc 600
 atcgagaaca gcttcatgac cgccagcaag tga 633

<210> 7
 <211> 633
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(633)

<400> 7
 atg gat gca atg aag aga ggg ctc tgc tgt gtg ctg ctg ctg tgt gga 48
 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
 1 5 10 15
 gca gtc ttc gtt tcg ccc agc ggt acc gga tcc cac agc cac cgc gac 96
 Ala Val Phe Val Ser Pro Ser Gly Thr Gly Ser His Ser His Arg Asp
 20 25 30
 ttc cag ccg gtg ctc cac ctg gtt gcg ctc aac agc ccc ctg tca ggc 144
 Phe Gln Pro Val Leu His Leu Val Ala Leu Asn Ser Pro Leu Ser Gly
 35 40 45
 ggc atg cgg ggc atc cgc ggg gcc gac ttc cag tgc ttc cag cag gcg 192
 Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala
 50 55 60
 cgg gcc gtg ggg ctg gcg ggc acc ttc cgc gcc ttc ctg tcc tcg cgc 240
 Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg
 65 70 75 80
 ctg cag gac ctg tac agc atc gtg cgc cgt gcc gac cgc gca gcc gtg 288
 Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala Val
 85 90 95
 ccc atc gtc aac ctc aag gac gag ctg ctg ttt ccc agc tgg gag gct 336
 Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu Ala
 100 105 110
 ctg ttc tca ggc tct gag ggt ccg ctg aag ccc ggg gca cgc atc ttc 384
 Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile Phe
 115 120 125
 tcc ttt gac ggc aag gac gtc ctg agg cac ccc acc tgg ccc cag aag 432
 Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln Lys
 130 135 140
 agc gtg tgg cat ggc tcg gac ccc aac ggg cgc agg ctg acc gag agc 480
 Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu Ser
 145 150 155 160
 tac tgt gag acg tgg cgg acg gag gct ccc tcg gcc acg ggc cag gcc 528
 Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln Ala
 165 170 175

tcc tcg ctg ctg ggg ggc agg ctc ctg ggg cag agt gcc gcg agc tgc 576
 Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser Cys
 180 185 190

cat cac gcc tac atc gtg ctc tgc att gag aac agc ttc atg act gcc 624
 His His Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ala
 195 200 205

tcc aag tag 633
 Ser Lys
 210

<210> 8
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 8
 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
 1 5 10 15

Ala Val Phe Val Ser Pro Ser Gly Thr Gly Ser His Ser His Arg Asp
 20 25 30

Phe Gln Pro Val Leu His Leu Val Ala Leu Asn Ser Pro Leu Ser Gly
 35 40 45

Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln Ala
 50 55 60

Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser Arg
 65 70 75 80

Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala Val
 85 90 95

Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu Ala
 100 105 110

Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile Phe
 115 120 125

Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln Lys
 130 135 140

Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu Ser
 145 150 155 160

Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln Ala
 165 170 175

Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser Cys
 180 185 190

His His Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr Ala
 195 200 205

Ser Lys
 210

<210> 9
 <211> 912
 <212> DNA
 <213> Homo sapiens

<400> 9
 atggatgcta tgaagcgcgg gctgtgttgc gtccctgctcc tgtgcggcgc tgtgtttgtg 60
 tccccctccg gcaccgggag cctgttcgag aagaagggtgt acctgagcga gtgcaagacc 120
 ggcaacggca agaactacag gggcaccatg agcaagacca agaacggcat cacctgccag 180
 aagtggagca gcaccagccc ccacaggcct cgcttcagcc ccgccacca cccagcgag 240
 ggcctggagg agaactactg ccgcaacccc gacaacgacc cccagggccc ttggtgctac 300
 accaccgacc ctgagaagcg ctacgactac tgcgacatcc tggagtgcga ggaagagtgt 360
 atgcactgca gcggggagaa ctacgacggc aagatcagca agacctgag cggcctggag 420
 tgccaggcct gggactccca gagccccac gccacggct acatccccag caagttcccc 480
 aacaagaacc tgaagaagaa ctattgtcgc aatcccagacc gcgagctgcg cccctggtgc 540
 ttcaccaccg atcccaacaa gcgctgggag ctgtgcgaca tccccgctg caccaccccc 600
 ccaccagca gcggccccac ctaccagtgc ctgaagggca ccggcgagaa ttaccgcggc 660
 aacgtggccg tgaccgtgag cggccacacc tgccagcact ggagcgccca gacccccac 720
 accacaacc gcacccccga gaacttcccc tgcaagaacc tcgacgagaa ttattgccgg 780
 aaccctgacg gcaagagggc cccctggtgc cacaccacca acagccaggt gcgctgggag 840
 tactgcaaga tccccagctg cgacagcagc cccgtgagca ccgagcagct ggcccccaacc 900
 gccctccct ga 912

<210> 10
 <211> 912
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(912)

<400> 10
 atg gat gca atg aag aga ggg ctc tgc tgt gtg ctg ctg ctg tgt gga 48
 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
 1 5 10 15
 gca gtc ttc gtt tcg ccc agc ggt acc gga tcc tta ttt gaa aag aaa 96
 Ala Val Phe Val Ser Pro Ser Gly Thr Gly Ser Leu Phe Glu Lys Lys
 20 25 30
 gtg tat ctc tca gag tgc aag act ggg aat gga aag aac tac aga ggg 144
 Val Tyr Leu Ser Glu Cys Lys Thr Gly Asn Gly Lys Asn Tyr Arg Gly
 35 40 45
 acg atg tcc aaa aca aaa aat ggc atc acc tgt caa aaa tgg agt tcc 192
 Thr Met Ser Lys Thr Lys Asn Gly Ile Thr Cys Gln Lys Trp Ser Ser
 50 55 60

act tct ccc cac aga cct aga ttc tca cct gct aca cac ccc tca gag	240
Thr Ser Pro His Arg Pro Arg Phe Ser Pro Ala Thr His Pro Ser Glu	
65 70 75 80	
gga ctg gag gag aac tac tgc agg aat cca gac aac gat ccg cag ggg	288
Gly Leu Glu Glu Asn Tyr Cys Arg Asn Pro Asp Asn Asp Pro Gln Gly	
85 90 95	
ccc tgg tgc tat act act gat cca gaa aag aga tat gac tac tgc gac	336
Pro Trp Cys Tyr Thr Thr Asp Pro Glu Lys Arg Tyr Asp Tyr Cys Asp	
100 105 110	
att ctt gag tgt gaa gag gaa tgt atg cat tgc agt gga gaa aac tat	384
Ile Leu Glu Cys Glu Glu Glu Cys Met His Cys Ser Gly Glu Asn Tyr	
115 120 125	
gac ggc aaa att tcc aag acc atg tct gga ctg gaa tgc cag gcc tgg	432
Asp Gly Lys Ile Ser Lys Thr Met Ser Gly Leu Glu Cys Gln Ala Trp	
130 135 140	
gac tct cag agc cca cac gct cat gga tac att cct tcc aaa ttt cca	480
Asp Ser Gln Ser Pro His Ala His Gly Tyr Ile Pro Ser Lys Phe Pro	
145 150 155 160	
aac aag aac ctg aag aag aat tac tgt cgt aac ccc gat agg gag ctg	528
Asn Lys Asn Leu Lys Lys Asn Tyr Cys Arg Asn Pro Asp Arg Glu Leu	
165 170 175	
cgg cct tgg tgt ttc acc acc gac ccc aac aag cgc tgg gaa ctt tgc	576
Arg Pro Trp Cys Phe Thr Thr Asp Pro Asn Lys Arg Trp Glu Leu Cys	
180 185 190	
gac atc ccc cgc tgc aca aca cct cca cca tct tct ggt ccc acc tac	624
Asp Ile Pro Arg Cys Thr Thr Pro Pro Pro Ser Ser Gly Pro Thr Tyr	
195 200 205	
cag tgt ctg aag gga aca ggt gaa aac tat cgc ggg aat gtg gct gtt	672
Gln Cys Leu Lys Gly Thr Gly Glu Asn Tyr Arg Gly Asn Val Ala Val	
210 215 220	
acc gtg tcc ggg cac acc tgt cag cac tgg agt gca cag acc cct cac	720
Thr Val Ser Gly His Thr Cys Gln His Trp Ser Ala Gln Thr Pro His	
225 230 235 240	
aca cat aac agg aca cca gaa aac ttt ccc tgc aaa aat ttg gat gaa	768
Thr His Asn Arg Thr Pro Glu Asn Phe Pro Cys Lys Asn Leu Asp Glu	
245 250 255	
aac tac tgc cgc aat cct gac gga aaa agg gcc cca tgg tgc cat aca	816
Asn Tyr Cys Arg Asn Pro Asp Gly Lys Arg Ala Pro Trp Cys His Thr	
260 265 270	
acc aac agc caa gtg cgg tgg gag tac tgt aag ata ccg tcc tgt gac	864
Thr Asn Ser Gln Val Arg Trp Glu Tyr Cys Lys Ile Pro Ser Cys Asp	
275 280 285	

tcc tcc cca gta tcc acg gaa caa ttg gct ccc aca gca cca cct taa 912
 Ser Ser Pro Val Ser Thr Glu Gln Leu Ala Pro Thr Ala Pro Pro
 290 295 300

<210> 11
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 11
 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
 1 5 10 15
 Ala Val Phe Val Ser Pro Ser Gly Thr Gly Ser Leu Phe Glu Lys Lys
 20 25 30
 Val Tyr Leu Ser Glu Cys Lys Thr Gly Asn Gly Lys Asn Tyr Arg Gly
 35 40 45
 Thr Met Ser Lys Thr Lys Asn Gly Ile Thr Cys Gln Lys Trp Ser Ser
 50 55 60
 Thr Ser Pro His Arg Pro Arg Phe Ser Pro Ala Thr His Pro Ser Glu
 65 70 75 80
 Gly Leu Glu Glu Asn Tyr Cys Arg Asn Pro Asp Asn Asp Pro Gln Gly
 85 90 95
 Pro Trp Cys Tyr Thr Thr Asp Pro Glu Lys Arg Tyr Asp Tyr Cys Asp
 100 105 110
 Ile Leu Glu Cys Glu Glu Glu Cys Met His Cys Ser Gly Glu Asn Tyr
 115 120 125
 Asp Gly Lys Ile Ser Lys Thr Met Ser Gly Leu Glu Cys Gln Ala Trp
 130 135 140
 Asp Ser Gln Ser Pro His Ala His Gly Tyr Ile Pro Ser Lys Phe Pro
 145 150 155 160
 Asn Lys Asn Leu Lys Lys Asn Tyr Cys Arg Asn Pro Asp Arg Glu Leu
 165 170 175
 Arg Pro Trp Cys Phe Thr Thr Asp Pro Asn Lys Arg Trp Glu Leu Cys
 180 185 190
 Asp Ile Pro Arg Cys Thr Thr Pro Pro Pro Ser Ser Gly Pro Thr Tyr
 195 200 205
 Gln Cys Leu Lys Gly Thr Gly Glu Asn Tyr Arg Gly Asn Val Ala Val
 210 215 220
 Thr Val Ser Gly His Thr Cys Gln His Trp Ser Ala Gln Thr Pro His
 225 230 235 240

<220>
<223> Description of Artificial Sequence: spacer
oligonucleotide

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<210> 13
<211> 24
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: spacer
oligonucleotide

<400> 13
tctagtgtcg tgcaggcatc tagt 24

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<210> 14
<211> 25
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: spacer
oligonucleotide

<400> 14
cgcgtcgggtg caggacgtga caaat 25

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<210> 15
<211> 19
<212> DNA
<213> Artificial Sequence
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<220>

<223> Description of Artificial Sequence: spacer
oligonucleotide

<400> 15

gtcgggtgcag gacgtgaca

19

<210> 16

<211> 18

<212> DNA

<213> Mus sp.

<400> 16

gtcgtgcagt acgtgaca

18

<210> 17

<211> 26

<212> DNA

<213> Mus sp.

<400> 17

gggccctacg tgctgtctca cacagc

26

<210> 18

<211> 26

<212> DNA

<213> Mus sp.

<400> 18

gggccctacg tgctgcctcg catggc

26

<210> 19

<211> 24

<212> DNA

<213> Mus sp.

<400> 19

cgcgtcgtgc aggacgtgac aaat

24

<210> 20

<211> 30

<212> DNA

<213> Mus sp.

<400> 20

ccagcggacg tgcgggaacc cacgtgtagg

30

<210> 21

<211> 26

<212> DNA
 <213> Homo sapiens

<400> 21
 tccacaggcg tgccgtctga cacgca 26

<210> 22
 <211> 35
 <212> DNA
 <213> Homo sapiens

<400> 22
 ccacagtgcac tacgtgggct ccaacaggct ctctt 35

<210> 23
 <211> 24
 <212> DNA
 <213> Rattus sp.

<400> 23
 acagtgcata cgtgggcttc caca 24

<210> 24
 <211> 17
 <212> DNA
 <213> Homo sapiens

<400> 24
 actacgtgct gcctagg 17

<210> 25
 <211> 26
 <212> DNA
 <213> Homo sapiens

<400> 25
 cccctcggac gtgactcgga ccacat 26

<210> 26
 <211> 37
 <212> DNA
 <213> Homo sapiens

<400> 26
 acgctgagtg cgtgcgggac tcggagtacg tgacgga 37

<210> 27
 <211> 28
 <212> DNA
 <213> Homo sapiens

<400> 27
cggacgtgct ggcgtggcac gtcctctc

28

<210> 28
<211> 249
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: XiaMac
promoter

<400> 28
gctagagtcg tgcaggacgt gacatctagt gtcgtgcagg acgtgacatc tagtgtcgtg 60
caggacgtga cagctagcat tccatcacgt ggcccagag aagcatccgg agtactacaa 120
ggactgctga cagcgagatt tctacaaggg actttccgct ggggactttc cagggaggtg 180
tggcctgggc gggactgggg agtggcgagc ctcagatgc tgcataaag cagcagctgc 240
ttttgccc 249

<210> 29
<211> 273
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: IRF-1
responsive nucleotide sequence

<400> 29
gctagagtcg tgcaggacgt gacatctagt gtcgtgcagg acgtgacatc tagtgtcgtg 60
caggacgtga cagctagcat tccatcacgt ggcccagag aagcatccgg agtactacaa 120
ggactgctga cagcgagatt tctacaaggg actttccgct ggggactttc cagggaggtg 180
tggcctgggc gggactgggg agtggcaagt gaaagtgaaa gtgaaagtga gagccctcag 240
atgctgcata taagcagcag ctgcttttgc ccc 273

<210> 30
<211> 243
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
promoter construct

<400> 30
gctagagtcg tgcaggacgt gacatctagt gtcgtgcagg acgtgacatc tagtgtcgtg 60
caggacgtga cagctagccc gggtcgaga tctgcatct gcattctaat tagtcagcaa 120
ccatagctccc gcccttaact ccgccatcc cgccctaac tccgccagt tccgccatt 180
ctccgcccga tctgtgacta attttttta tttatgcaga ggccgaggcc gcctcggcct 240
ctg 243

<210> 31
<211> 18

<212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 31
 tgagttaatt aaggatcc

18

<210> 32
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 32
 ctcgagtcgc gagccacccat g

21

<210> 33
 <211> 6
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: 6-His tag

<400> 33
 His His His His His His
 1 5

<210> 34
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 oligonucleotide

<400> 34
 tcgagctagc gtcgactcg

19